UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

STRIPCROPPING, FIELD
(Acre)

Code 586

DEFINITION

Growing crops in a systematic arrangement of strips or bands across the general slope (not on the contour) to reduce water erosion. The crops are arranged so that a strip of grass or a close-growing crop is alternated with a clean-tilled crop or fallow.

PURPOSE

To help control erosion and runoff on sloping cropland where contour stripcropping is not practical.

CONDITIONS WHERE PRACTICE APPLIES

On sloping cropland and certain recreation and wildlife land.

CRITERIA

1. Erosion Control:

A. Erosion in natural drains and other areas that carry a concentrated flow of water will be controlled by use of Grassed Waterway or Outlet-412, Underground Outlet-620, or Water and Sediment Control Basin-638.

B. The current water erosion prediction model will be used to determine the effectiveness of field stripcropping. The Cover and Management Factor ("C") will represent the crop rotation planned for the field. The Supporting Practice Factor, "P" for use in soil loss calculations should represent all supporting practices applied to the field. The P value for field stripcropping can be obtained using procedures outlined in Section I-C, Technical Guide.

C. Cross Slope Farming-203 is a supportive practice for field stripcropping systems.

2. Strip Width:

A. Crop strip widths will be the same as terrace spacing for the same conditions.

B. A 10 percent variation in the crop strip widths is permitted where needed to balance the area in strips, improve alignment, or to obtain desired multiples of rows.

C. Row crop strips will be of even widths.

D. Minimum widths of permanent sod in Field Strip Cropping Systems with sod buffer strips are provided in Table 1.

Table 1 - MINIMUM WIDTHS OF PERMANENT SOD IN BUFFER FIELD STRIPCROPPING SYSTEMS

	Vegetation Type	
Land Slope Percent	Grass 1/ Feet	Legume Feet
1- 2	12	20
3- 5	20	24
6- 8	20	30
9-12	24	30

1/ The minimum width of sod-forming grass strips may be reduced by 25% in counties with R values of 350 or less.

E. To allow for slippage of equipment during planting and cultivation up to 3 feet should be added to strip widths.

3. Strip Layout:

A. Strip layout will be as near perpendicular to the general slope of the field as practical. The maximum crop strip grade will not exceed 50 percent of the typical up and down hill slope of the field.

B. Deviation from the maximum crop strip grade shall occur only to correct for topographic irregularities, to prevent excessively sharp turns, and to improve alignment. The amount of field area that deviates from the maximum crop strip

grade will not exceed 20 percent of the total field area.

C. Correction sod strips shall be established as needed to realign crop strip orientation to the desired cross slope grade. Their width will be that required to bring the crop strips back to the desired grade.

D. Sod turn strips shall be established as needed to facilitate equipment operation through sharp turns and for turning around. Their minimum width shall be that required to compliment the widths of equipment used.

E. Follow specifications in Pasture and Hayland Planting-512 when establishing sod crops.

4. Planting and Tillage

All planting and tillage operations will be parallel to strip boundaries.

5. Field Border

Field borders will be established or maintained. Tillage operations up and down slope at ends of the strips will not be used.

CONSIDERATIONS

1. Field stripcropping should be used only where contour stripcropping is not practical. Field stripcropping should be used in conjunction with other conservation practices (diversions, grassed waterways, field borders, crop residue use and conservation tillage) for more effective erosion control.

2. A specific conservation cropping sequence should be planned to ensure orderly rotation of crops.

3. Field stripcropping may reduce volume and rate of surface runoff, thus increasing the amount of water which infiltrates into the soil.

4. Field stripcropping may reduce erosion and the delivery of sediment and sediment attached pollutants to the surface waters. However, the leachable pollutants moved toward the groundwater may increase.

5. Layout of the strips may be improved by removal of fences or other obstructions. Field boundaries and/or field roads should be located to give the best layout.

6. Sod strips and grassed waterway areas may be used for grazing or hay production with good management.

7. Irrigation and pest management may not be compatible with multiple crops in a field.

PLANS AND SPECIFICATIONS

Plans and specifications for installing field stripcropping systems shall be prepared for specific fields in accordance with the criteria contained in this standard. Plans and specifications include drawings, layout and checkout notes, job sheets, narrative statements in conservation plans and other similar documents. The plans and specifications are to specify the requirements for installing this practice, such as the kind, amount, or quality of material to be used; and/or the timing or sequence of installation activities.

OPERATION AND MAINTENANCE

1. Fields with stripcropping systems should be periodically inspected to ensure that concentrated flow erosion is being adequately controlled. Additional practices, such as Grassed Waterways or Outlet-412 may be required.

2. Field stripcropping systems which have sod strips will need mowing or spraying for weed control, repair of eroded areas and applications of fertilizer to maintain stand and vigor of sod.

3. Berms of soil which tend to build up at edges of sod strips must be removed if they reduce the effectiveness of the practice.

4. Operation and maintenance requirements shall be an identifiable part of the plans and specifications developed for the specific site. Depending on the scope of the practice, this may be accomplished with statements in the plans and specifications; the conservation plan narrative; conservation guide sheets; or a separate O&M plan.